# Antonis Maronikolakis, PhD Student

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#### **±** Education

PhD Supervised by Hinrich Schütze

January 2020 - Current

 $Ludwig-Maximilians-Universit \"at,\ Munich,\ Germany$ 

Topic: Hate Speech Detection and Analysis

MSc Speech and Language Processing - First Honours (1:1)

September 2018 - September 2019

University of Sheffield, Sheffield, UK

Thesis: Text Generation for News Headlines

BSc Computer Science - 8.4/10.0 (Upper 2:1) October 2014 - June 2018

University of Piraeus, Athens, Greece

Thesis: Approximation and Heuristic Algorithms for Ridesharing

### Research Interests

hate speech, social nlp, model and data bias, dataset curation, data ethics

## Publications

## 2022

Listening to Affected Communities to Define Extreme Speech: Dataset and Experiments. Antonis Maronikolakis, Axel Wisiorek, Leah Nann, Haris Jabbar, Sahana Udupa and Hinrich Schütze. 2022. In Findings of the Association for Computational Linguistics: ACL 2022.

Separating Hate Speech and Offensive Language Classes via Adversarial Debiasing Shuzhou Yuan, Antonis Maronikolakis, Hinrich Schütze. 2022. Pre-print.

### 2021

Wine is Not v i n. – On the Compatibility of Tokenizations Across Languages. Antonis Maronikolakis, Philipp Dufter, and Hinrich Schütze. 2021. In Findings of the Association for Computational Linguistics: EMNLP 2021, Punta Cana, Dominican Republic. Association for Computational Linguistics.

BERT Cannot Align Characters. Antonis Maronikolakis, Philipp Dufter, and Hinrich Schütze. 2021. In Proceedings of the Second Workshop on Insights from Negative Results in NLP, Online and Punta Cana, Dominican Republic. Association for Computational Linguistics.

Artificial Intelligence, Extreme Speech, and the Challenges of Online Content Moderation. Sahana Udupa, Elonnai Hickok, Antonis Maronikolakis, Hinrich Schuetze, Laura Csuka, Axel Wisiorek, Leah Nann. 2021. AI4Dignity Project. EU Commission Policy Brief.

Identifying Automatically Generated Headlines Using Transformers. Antonis Maronikolakis, Hinrich Schütze, and Mark Stevenson. 2021. In Proceedings of the Fourth Workshop on NLP for Internet Freedom: Censorship, Disinformation, and Propaganda. Association for Computational Linguistics.

Multidomain Pretrained Language Models for Green NLP. Antonis Maronikolakis and Hinrich Schütze. 2021. In Proceedings of the Second Workshop on Domain Adaptation for NLP, Kyiv, Ukraine. Association for Computational Linguistics.

### 2020

Analyzing Political Parody in Social Media. Antonis Maronikolakis, Danae Sánchez Villegas, Daniel Preotiuc-Pietro, and Nikolaos Aletras. 2020. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics.

# Professional Experience

NLP Researcher at AI4Dignity

- Hate Speech Data Analysis for Marginalized Global Communities January 2021 December 2021
  - Worked in a multi-disciplinary team of NLP researchers, anthropologists and fact-checkers.
  - Led data collection and annotation efforts culminating in a dataset of 20k examples and multiple label categories from a team of 13 annotators spanning 4 countries (Brazil, Germany, India and Kenya).
  - Developed machine learning models, performed data analysis and deployed a proof-of-concept tool to combat hate speech in the examined countries.
  - Our work and dataset is to be published in Findings of ACL 2022.

### Speech Processing Practitioner for VoiceBase Research Lab

- Analyzed Variational Autoencoders and Phrase Detection methods November 2018 August 2019
  - As part of Dr. Thomas Hain's VoiceBase research lab, I assisted researchers by exploring a novel Variational Autoencoder structure, alongside work on Phrase Detection and Extraction.
  - Analyzed and ran experiments with the Factorized Hierarchical Variational Autoencoder repository and on various Phrase Detection algorithms.
  - Set up and documented experiment configurations for ESPNet and DeepSpeech.

#### AI Programmer/Writer for Google Summer of Code

- Mentored under Dr. Peter Norvig, working on AI algorithms
- June September 2017
- Worked on the Python repository of Dr. Norvig's book, Artificial Intelligence: A Modern Approach.
- Implemented, evaluated and wrote about Natural Language Processing and Machine Learning algorithms and concepts.
- Collaborated with Dr. Norvig to polish pseudocode from the book.
- After the end of the project, I was given administrator rights to the repository.

## **T** Awards

- Scholarship for academic excellence 2016-2017, 2017-2018
- Kaggle Machine Learning Competitions (2018) Silver and Bronze Medals
- Microsoft Imagine Cup Competition (2015 and 2016) National Finalist
- National Computer Science Competition 2014 Finalist